

Dec. 3 1958

REF:

1 Papillated areas from Lac- colonies 3 days old were streaked on
2 B Lac to look for V vs ~~+~~ straight +.

1 - 14 probably ✓

See next

17 possibly ✓

expt =

2 - 11

- 12 possibly ✓

E50B

~~- 24~~

= Area + !

- 34 probably not ✓

3 - 11

✓

- 16

✓

- 23

possibly ✓

4 - 1

Not ✓

- 3

probably ✓

- 12

probably ✓

- 17

✓

- 19

probably ✓

- 22

possibly ✓

- 30

possibly ✓

- 34

✓

- 36

probably ✓

- 41

✓

5 - 11

see next expt.

- 15

~~see next expt.~~

- 21

- 27

Dec. 319 58

REF:

Dec. 4 1958

Lac Reactions of Original E50's.

REF:

1	2	3	4	5	6	7	8	9	10
REF.									
1 Streaks on B Lac from DM-Ara-B, liquid of original ESO's (only those circled in red by J L).									
2 1 DAY (all - except :)									
3 2 DAYS									
4	5	6	7	8	9	10	11	12	13
1 1-14	2	3	4	5	6	7	8	9	10
2 very	3	4	5	6	7	8	9	10	11
3 few dark	4	5	6	7	8	9	10	11	12
4	5	6	7	8	9	10	11	12	13
5 > 1/2 V or pap?	6	7	8	9	10	11	12	13	14
6 ; original darks	7	8	9	10	11	12	13	14	15
7 now look full +	8	9	10	11	12	13	14	15	16
8 bluish + pinkish -'s, larger	9	10	11	12	13	14	15	16	17
9 col at papillated Few Revd	10	11	12	13	14	15	16	17	18
10 (in brush area.)	11	12	13	14	15	16	17	18	19
11 3 days - all pap	12	13	14	15	16	17	18	19	20
12 (E-)	13	14	15	16	17	18	19	20	21
13 original darks now look full +;	14	15	16	17	18	19	20	21	22
14 L/2 of rest papillated E +.	15	16	17	18	19	20	21	22	23
15	16	17	18	19	20	21	22	23	24
16 > 1/2 pap. E + (possibly V?)	17	18	19	20	21	22	23	24	25
17 orig. darks seem full +	18	19	20	21	22	23	24	25	26
18	19	20	21	22	23	24	25	26	27
19	20	21	22	23	24	25	26	27	28
20	21	22	23	24	25	26	27	28	29
21	22	23	24	25	26	27	28	29	30
22	23	24	25	26	27	28	29	30	31
23	24	25	26	27	28	29	30	31	32
24	25	26	27	28	29	30	31	32	33
25	26	27	28	29	30	31	32	33	34
26	27	28	29	30	31	32	33	34	35
27	28	29	30	31	32	33	34	35	36
28	29	30	31	32	33	34	35	36	37
29	30	31	32	33	34	35	36	37	38
30	31	32	33	34	35	36	37	38	39
31	32	33	34	35	36	37	38	39	40
32	33	34	35	36	37	38	39	40	41
33	34	35	36	37	38	39	40	41	42
34	35	36	37	38	39	40	41	42	43
35	36	37	38	39	40	41	42	43	44
36	37	38	39	40	41	42	43	44	45
37	38	39	40	41	42	43	44	45	46
38	39	40	41	42	43	44	45	46	47
39	40	41	42	43	44	45	46	47	48
40	41	42	43	44	45	46	47	48	49
41	42	43	44	45	46	47	48	49	50
42	43	44	45	46	47	48	49	50	51
43	44	45	46	47	48	49	50	51	52
44	45	46	47	48	49	50	51	52	53
45	46	47	48	49	50	51	52	53	54
46	47	48	49	50	51	52	53	54	55
47	48	49	50	51	52	53	54	55	56
48	49	50	51	52	53	54	55	56	57
49	50	51	52	53	54	55	56	57	58
50	51	52	53	54	55	56	57	58	59
51	52	53	54	55	56	57	58	59	60
52	53	54	55	56	57	58	59	60	61
53	54	55	56	57	58	59	60	61	62
54	55	56	57	58	59	60	61	62	63
55	56	57	58	59	60	61	62	63	64
56	57	58	59	60	61	62	63	64	65
57	58	59	60	61	62	63	64	65	66
58	59	60	61	62	63	64	65	66	67
59	60	61	62	63	64	65	66	67	68
60	61	62	63	64	65	66	67	68	69
61	62	63	64	65	66	67	68	69	70
62	63	64	65	66	67	68	69	70	71
63	64	65	66	67	68	69	70	71	72
64	65	66	67	68	69	70	71	72	73
65	66	67	68	69	70	71	72	73	74
66	67	68	69	70	71	72	73	74	75
67	68	69	70	71	72	73	74	75	76
68	69	70	71	72	73	74	75	76	77
69	70	71	72	73	74	75	76	77	78
70	71	72	73	74	75	76	77	78	79
71	72	73	74	75	76	77	78	79	80
72	73	74	75	76	77	78	79	80	81
73	74	75	76	77	78	79	80	81	82
74	75	76	77	78	79	80	81	82	83
75	76	77	78	79	80	81	82	83	84
76	77	78	79	80	81	82	83	84	85
77	78	79	80	81	82	83	84	85	86
78	79	80	81	82	83	84	85	86	87
79	80	81	82	83	84	85	86	87	88
80	81	82	83	84	85	86	87	88	89
81	82	83	84	85	86	87	88	89	90
82	83	84	85	86	87	88	89	90	91
83	84	85	86	87	88	89	90	91	92
84	85	86	87	88	89	90	91	92	93
85	86	87	88	89	90	91	92	93	94
86	87	88	89	90	91	92	93	94	95
87	88	89	90	91	92	93	94	95	96
88	89	90	91	92	93	94	95	96	97
89	90	91	92	93	94	95	96	97	98
90	91	92	93	94	95	96	97	98	99
91	92	93	94	95	96	97	98	99	100
92	93	94	95	96	97	98	99	100	101
93	94	95	96	97	98	99	100	101	102
94	95	96	97	98	99	100	101	102	103
95	96	97	98	99	100	101	102	103	104
96	97	98	99	100	101	102	103	104	105
97	98	99	100	101	102	103	104	105	106
98	99	100	101	102	103	104	105	106	107
99	100	101	102	103	104	105	106	107	108
100	101	102	103	104	105	106	107	108	109
101	102	103	104	105	106	107	108	109	110
102	103	104	105	106	107	108	109	110	111
103	104	105	106	107	108	109	110	111	112
104	105	106	107	108	109	110	111	112	113
105	106	107	108	109	110	111	112	113	114
106	107	108	109	110	111	112	113	114	115
107	108	109	110	111	112	113	114	115	116
108	109	110	111	112	113	114	115	116	117
109	110	111	112	113	114	115	116	117	118
110	111	112	113	114	115	116	117	118	119
111	112	113	114	115	116	117	118	119	120
112	113	114	115	116	117	118	119	120	121
113	114	115	116	117	118	119	120	121	122
114	115	116	117	118	119	120	121	122	123
115	116	117	118	119	120	121	122	123	124
116	117	118	119	120	121	122	123	124	125
117	118	119	120	121	122	123	124	125	126
118	119	120	121	122	123	124	125	126	127
119	120	121	122	123	124	125	126	127	128
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121	122	123	124	125	126	127	128	129	130
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123	124	125	126	127	128	129	130	131	132
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128	129	130	131	132	133	134	135	136	137
129	130	131	132	133	134	135	136	137	138
130	131	132	133	134	135	136	137	138	139
131	132	133	134	135	136	137	138	139	140
132	133	134	135	136	137	138	139	140	141
133	134	135	136	137	138	139	140	141	142
134	135	136	137	138	139	140	141	142	143
135	136	137	138	139	140	141	142	143	144
136	137	138	139	140	141	142	143	144	145
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142	143	144	145	146	147	148	149	150	151
143	144	145	146	147	148	149	150	151	152
144	145	146	147	148	149	150	151	152	153
145	146	147	148	149	150	151	152	153	154
146	147	148	149	150	151	152	153	154	155
147	148	149	150	151	152	153	154	155	156
148	149	150	151	152	153	154	155	156	157

19

REF-1

19

REF:

1 5-57 Ara v etc. population looking

2 tested ~~on~~ ^(from Ara) Lac + Ara } a. b. c -

3 20 hrs = normal -

4 48 hrs ^{didn't grow} ⁱⁿ ^{ara} ^b ^c Ara - , + , V

5 9m ^{ara} ^b ^c Lac + , - , V

6 C + , - , V, butterfly

7 8 hrs ^{dark + light - ?}

9 - , + (or light -), and
10 butterfly all butterfly, large normal

50G

1 = several Lac+ (c⁺) and all Lac and Ara

2 20 hrs all normal -

3 pure light

4 Ara -

5 Lac -

6 Dark, pigmented

7 + , - , V

8 + , - , V + butterfly

9 mixed dark
10 light

+ , - , V, butterfly

+ , - , V, butterfly

Dec 8 1958

REF:

1 2 3-57

From 50 F \rightarrow Lac + Ara:

A b: from Lac plate: -¹, +², $\frac{3}{3}$, butterfly

B " from Ara " : -¹, +², $\frac{3}{3}$

C c: from Lac plate: -¹, +², (only one), butterfly $\frac{3}{3}$

D " Ara " : -¹, +², butterfly $\frac{3}{3}$

From 50 G: E from dark pop: from Ara: -¹, +², $\frac{3}{3}$, V

F From " " Lac: -¹, +², $\frac{3}{3}$, V, butterfly

G From dark + light mixed from Ara: -¹, +², $\frac{3}{3}$, light V, dark V

H " " ~~Lac~~ " " Lac: -¹, +², $\frac{3}{3}$, light V, dark V

Dec. 9 1958

REF:

Dec. 12 1958

REF:

50 J

Dec. 17 1958

REF:

19

REF:

1	2	3	4	5	6	7	8	9	10
1	2	3	4	5	6	7	8	9	10
1	Streaks from papillated Lac colonies from Lac plates of 50 I								
2	on B Lac -								
3	2-34 large : mostly +								
4	2-34 small : " "								
5	3-16 #6 large : mostly -, some pop = lg								
6	#8 small : mostly +								
7	#11 large : +, -, V?								
8	+,-, V?								
9	Restreak a +, -, + V on Lac + Ara = 40 L								
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50

Dec. 12 1958

REF:

Theoretically :

	W3229	W3836	W4358
φ Lac (=13)	-	-	+
α² Lac	+	+	-
Cygnd	-	-	-
W H + 47	+	-	+

w 3836 = Hfr Lac-M-V.

w3229 = Hfr Lac^R M

W 4358 = Hfr Lac⁻ Ara^s
Th

12/12 1958

REF:

	1	2	3	4	5	6	7	8	9	10
1		O = growth on EM-Ara-B.								
2										
3		EM-Ara-B ₁								
4		4163 4068								
5		W 2994 W 4068								
6	1-14	# ①	+	-		-	-			
7		②	+	-		-	-			
8		③	+	-		-	-			
9		④	-	+		-	-			
0		⑤ Ara	+	+		-	-			
1		⑥	-	+		-	-			
2		spatty ⑦	-	+		-	-			
3		⑧	-	+		-	-			
4		⑨	-	+		-	-			
5		⑩	-	+		-	-			
6		⑪	-	+		-	-			
7		⑫	-	+		-	-			
8		⑬ Ara	+	-		-	-	+ (1 col)		
9		⑭	-	+		-	-	-		
0		⑮	-	+		-	-	-		
1		⑯	-	+		-	-	-		
2		⑰ Ara	+	-		-	-	-		
3		⑱	-	+		-	-	-		
4		⑲	-	+		-	-	-		
5		⑳ Ara	+	-		-	-	-		
6		㉑	-	+		-	-	-		
7		㉒ Ara	+	-		-	-	+ (3 col)		
8		㉓	-	+		-	-	-		
9		㉔	-	+		-	-	-		
0		㉕ Ara	+	-		-	-	-		
1		㉖	-	+		-	-	-		
2		㉗ Ara	+	-		-	-	-		
3		㉘	-	+		-	-	-		
4		㉙ Ara	+	-		-	-	-		
5		㉚	-	+		-	-	-		
6		㉛ Ara	+	-		-	-	-		
7		㉜	-	+		-	-	-		
8		㉝ Ara	+	-		-	-	-		
9		㉞	-	+		-	-	-		
0		㉟ Ara	+	-		-	-	-		
1		㉟	-	+		-	-	-		
2		㉟ Ara	+	-		-	-	-		
3		㉟	-	+		-	-	-		
4		㉟ Ara	+	-		-	-	-		
5		㉟	-	+		-	-	-		
6		㉟ Ara	+	-		-	-	-		
7		㉟	-	+		-	-	-		
8		㉟ Ara	+	-		-	-	-		
9		㉟	-	+		-	-	-		
0		㉟ Ara	+	-		-	-	+ (1 col) + (1 col)		
1		㉟	-	+		-	-	-		
2		㉟ Ara	+	-		-	-	-		
3		㉟	-	+		-	-	-		
4		㉟ Ara	+	-		-	-	-		
5		㉟	-	+		-	-	-		
6		㉟ Ara	+	-		-	-	-		
7		㉟	-	+		-	-	-		
8		㉟ Ara	+	-		-	-	-		
9		㉟	-	+		-	-	-		
0		㉟ Ara	+	-		-	-	-		
1		㉟	-	+		-	-	-		
2		㉟ Ara	+	-		-	-	-		
3		㉟	-	+		-	-	-		
4		㉟ Ara	+	-		-	-	-		
5		㉟	-	+		-	-	-		
6		㉟ Ara	+	-		-	-	-		
7		㉟	-	+		-	-	-		
8		㉟ Ara	+	-		-	-	-		
9		㉟	-	+		-	-	-		
0		㉟ Ara	+	-		-	-	-		
1		㉟	-	+		-	-	-		
2		㉟ Ara	+	-		-	-	-		
3		㉟	-	+		-	-	-		
4		㉟ Ara	+	-		-	-	-		
5		㉟	-	+		-	-	-		
6		㉟ Ara	+	-		-	-	-		
7		㉟	-	+		-	-	-		
8		㉟ Ara	+	-		-	-	-		
9		㉟	-	+		-	-	-		
0		㉟ Ara	+	-		-	-	-		
1		㉟	-	+		-	-	-		
2		㉟ Ara	+	-		-	-	-		
3		㉟	-	+		-	-	-		
4		㉟ Ara	+	-		-	-	-		
5		㉟	-	+		-	-	-		
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7		㉟	-	+		-	-	-		
8		㉟ Ara	+	-		-	-	-		
9		㉟	-	+		-	-	-		
0		㉟ Ara	+	-		-	-	-		
1		㉟	-	+		-	-	-		
2		㉟ Ara	+	-		-	-	-		
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4		㉟ Ara	+	-		-	-	-		
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6		㉟ Ara	+	-		-	-	-		
7		㉟	-	+		-	-	-		
8		㉟ Ara	+	-		-	-	-		
9		㉟	-	+		-	-	-		
0		㉟ Ara	+	-		-	-	-		
1		㉟	-	+		-	-	-		
2		㉟ Ara	+	-		-	-	-		
3		㉟	-	+		-	-	-		
4		㉟ Ara	+	-		-	-	-		
5		㉟	-	+		-	-	-		
6		㉟ Ara	+	-		-	-	-		
7		㉟	-	+		-	-	-		
8		㉟ Ara	+	-		-	-	-		
9		㉟	-	+		-	-	-		
0		㉟ Ara	+	-		-	-	-		
1		㉟	-	+		-	-	-		
2		㉟ Ara	+	-		-	-	-		
3		㉟	-	+		-	-	-		
4		㉟ Ara	+	-		-	-	-		
5		㉟	-	+		-	-	-		
6		㉟ Ara	+	-		-	-	-		
7		㉟	-	+		-	-	-		
8		㉟ Ara	+	-		-	-	-		
9		㉟	-	+		-	-	-		
0		㉟ Ara	+	-		-	-	-		
1		㉟	-	+		-	-	-		
2		㉟ Ara	+	-		-	-	-		
3		㉟	-	+		-	-	-		
4		㉟ Ara	+	-		-	-	-		
5		㉟	-	+		-	-	-		
6		㉟ Ara	+	-		-	-	-		
7		㉟	-	+		-	-	-		
8		㉟ Ara	+	-		-	-	-		
9		㉟	-	+		-	-	-		
0		㉟ Ara	+	-		-	-	-		
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2		㉟ Ara	+	-		-	-	-		
3		㉟	-	+		-	-	-		
4		㉟ Ara	+	-		-	-	-		
5		㉟	-	+		-	-	-		
6		㉟ Ara	+	-		-	-	-		
7		㉟	-	+		-	-	-		
8		㉟ Ara	+	-		-	-	-		
9		㉟	-	+		-	-	-		
0		㉟ Ara	+	-		-	-	-		
1		㉟	-	+		-	-	-		
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	1	2	3	4	5	6	7	8	9	10
1										
2										
3										
4	EM-Ara-B ₁									
5	4-1 → 2	Ara +								
6		tal +								
7	3	-	tal							
8	→ 4	-	-							
9	5	-	+							
10	6 Ara + sl									
11	7	-	+							
12	8	-	+							
13	9	-	+							
14	10 Ara +									
15	11 (12)	+	-							
16	12 (13)	+	+ sl							
17	13 → 14	-	-							
18	15	-	+							
19	16 Ara									
20	17	-	+							
21	18	-	+							
22	19	+	-							
23	20	-	+							
24	21	-	+							
25	22	-	+							
26	23	-	+							
27	24 (25)	+	-							
28	25 (26)	+ sl	-							
29	26	-	+							
30	27	+ sl	-							
31	28 spotty	+ sl	+							
32	29 Ara	+ sl	+							
33	30 Ara	-	+							
34	31 Ara	-	+							
35	32 → 33	+	+							
36	33	-	+							
37	34 Ara	-	+							
38	35 Ara	-	+							
39	36 Ara	-	+							
40	37 Ara	-	+							
41	38 Ara	-	+							
42	39 Ara	-	+							
43	40 Ara	-	+							
44	41 Ara	-	+							
45	42 Ara	-	+							

3229 5836

EM-Lac didn't grow after 2 days

19

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1	2	3	4	5	6	7	8	9	10
1									
2									
3									
4									
5	EM Ara B1			EM Lac			3 days in C ⁺ in Lac		
6	SOF6 ①	+	-	1 col	-		stroke dark		
7	= 2	+	-	-	-		"		
8	5-573 3	+	-	-	-		"		
9	4	+	-	-	-		"		
0	5	+	-	-	-		"		
1	6	+	-	-	-		"		
2	7	+	-	-	-		"		
3	dark 8	+	-	+ (4 col)	-		"		
4	9	+	-	+ (4 col)	+ (4 col)		"		
5	10	+	-	-	-		"		
6	11	+	-	-	-		"		
7	12	+	-	-	-		"		
8	13	+	-	-	-		"		
9	14	+	-	-	-		"		
0	15	+	-	-	-		"		
1	16	+	-	-	-		"		
2	17	+	-	-	-		"		
3	18	+	-	-	-		"		
4	19	+	-	-	-		"		
5	20	+	-	-	-		"		
6	21	+	-	-	-		"		
7	22	-	-	-	-		"		
8	23	-	-	-	-		"		
9	24	-	-	-	-		"		
0	25	-	-	-	-		"		
1	26	-	-	-	-		"		
2	27	-	-	-	-		"		
3	28	-	-	-	-		"		
4	29	-	-	-	-		"		
5	30	-	-	-	-		"		
6	31	-	-	-	-		"		
7	32	-	-	-	-		"		
8	33	-	-	-	-		"		
9	34	Ara +	-	-	-		"		
0	35	+	-	-	-		"		
1	36	+	-	-	-		"		
2	37	+	-	-	-		"		
3	38	+	-	-	-		"		
4	39	+	-	-	-		"		
5	40	+	-	-	-		"		
6	41	+	-	-	-		"		
7	42	+	-	-	-		"		
8	43	+	-	-	-		"		
9	44	+	-	-	-		"		
0	45	+	-	-	-		"		

Dec. 16 1958

REF:

	1	2	3	4	5	6	7	8	9	10
From Ara plates										
4	Plate 1 : 2-34 # 33	lgt	1-3	, dark 4-6	,	few 7-8				
5	2-34 # 37	lgt	-	5, dark	6-10					
6	Plate 2 3-16 # 9	lgt	1-5	, dark	6-10					
7	4-1 # 13	lgt	1-5	, dark	6-10					
8	Plate 3 4-1 # 14	small	1-4	large	5-10					
9	4-1 # 35	lgt	1-4	dark	5-8	V	9-10			
0	4-6 # 21	lgt	1-4	dark	5-8	, few	9-10			
1	5-20 # 26	lgt	1-4	dark	5-8					
2	5-20 # 41	lgt	-	dark	5-9					

Since "single" colony isolates gave ambiguous results in Ara typing (see 50M), they were restreaked from little penassay on B Ara. They manifested colonial differences (see below), so representative types were retested for Lac and Ara types.

~~On~~ On B Ara (2 days)

2-34	# 33	mostly orange -	, few light - , 2 sl. pap.
	# 37	as above	
3-16	# 9	as above	
4-1	# 13	as above	
	# 14	no good color dif;	few small col, mostly large
	# 35	more light than orange	; few V?
4-6	# 31	mostly orange	, some light, some pap (large centra area)
5-20	# 21	mostly	very few dark
	# 26	mostly	few lgt
	# 41	mostly	few dark ?

Dec. 18 1958

REF:

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REF:

	1	2	3	4	EM - W4163	Ara - W4068	B: W4069		8	9	10
1											
2											
3	4-1 #14 1g ⁺	"	"	"	+ { very weak	-	+	-	-	-	-
4	"	"	"	"	+ weak	-	+	+	-	-	-
5	#35 1g ⁺	"	"	"	+ +	-	+	+	-	-	-
6	"	"	"	"	-	-	+	+	-	-	-
7	"	"	"	"	-	-	+	+	-	-	-
8	"	"	"	"	-	-	+	+	-	-	-
9	dark	"	"	"	-	-	+	+	-	-	-
0	"	"	"	"	-	-	+	+	-	-	-
1	"	"	"	"	-	-	+	+	-	-	-
2	"	"	"	"	-	-	+	+	-	-	-
3	V	"	"	"	-	-	+	+	-	-	-
4	"	"	"	"	-	-	+	+	-	-	-
5	4-6 #31 1g ⁺	"	"	"	+ { weak	-	-	+	-	-	-
6	"	"	"	"	+ weak	-	-	+	-	-	-
7	"	"	"	"	-	-	+	+	-	-	-
8	dark	"	"	"	-	-	+	+	-	-	-
9	"	"	"	"	-	-	+	+	-	-	-
0	"	"	"	"	-	-	+	+	-	-	-
1	"	"	"	"	-	-	+	+	-	-	-
2	"	"	"	"	-	-	+	+	-	-	-
3	pop	"	"	"	-	-	+	+	-	-	-
4	"	"	"	"	-	-	+	+	-	-	-
5	5-20 #21 1g ⁺	"	"	"	+ { weak	-	-	+	-	-	-
6	"	"	"	"	+ weak	-	-	+	-	-	-
7	"	"	"	"	-	-	+	+	-	-	-
8	dark	"	"	"	-	-	+	+	-	-	-
9	"	"	"	"	-	-	+	+	-	-	-
0	"	"	"	"	-	-	+	+	-	-	-
1	"	"	"	"	-	-	+	+	-	-	-
2	#26 1g ⁺	"	"	"	-	-	+	+	-	-	-
3	"	"	"	"	-	-	+	+	-	-	-
4	"	"	"	"	-	-	+	+	-	-	-
5	dark	"	"	"	-	-	+	+	-	-	-
6	"	"	"	"	-	-	+	+	-	-	-
7	"	"	"	"	-	-	+	+	-	-	-
8	"	"	"	"	-	-	+	+	-	-	-
9	#41 1g ⁺	"	"	"	-	-	+	+	-	-	-
0	"	"	"	"	-	-	+	+	-	-	-
1	"	"	"	"	-	-	+	+	-	-	-
2	dark	"	"	"	-	-	+	+	-	-	-
3	"	"	"	"	-	-	+	+	-	-	-
4	"	"	"	"	-	-	+	+	-	-	-
5	"	"	"	"	-	-	+	+	-	-	-
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9	"	"	"	"	-	-	+	+	-	-	-
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50 M

CROBIAL
NETICS

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Typing of 5-20 and 5-27			Fra -	5 segs.		m Blac			
w3836	w4358	w4362					w3836	w4358	w4362
w4265	-	+	+						
w4362	+	+ strong	-						
5-20	-	+	-						
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Dec. 26th 58

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1	2	3	4	5	6	7	8	9	10
2-34 and									
4-1 Lac typing on EMB Lac	w3229	w3836	w4361		41: Rather populated; 2-34 very poor.	w3229	w3836	w4358	w4361
W 4265	-	-	+ -	w 4265	-	-	+	+	+
W 4361	+	+	+ -	w 4359	+	+	?	?	?
H-11	-	-	+	2-341	-	-	+	+	+
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Dec. 24 1958

REF:

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1 5-5 recombinants

EMB - Lac

EM - Ara - B1

w3229

w3836

w4361

w4362

w4163

w4068

w4069

5-5

1

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+

revertants

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Dec. 26, 1958

REF:

1 5-20 isolates from ~~O-~~ Char (see expts. vomcheek)
2 he' lac' lac'
3 W3836 W4358 W4362

5-20 #41 lgt - + - sand

dark

+
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+
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#21 lgt

no ket

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-
-

didn't grow well

dark

#26

lgt

dark

+
+
+
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+
+

all
lac'

mostly
lac'

mostly lac' lac'

! case lac' No! Above + was artifact.

Revisions? and management
in 5-57.

50 - D

19

REF:

Dec. 22 1958

REF:

Dec. 23rd 58

REF:

	1	2	3	4	5	6	7	8	9	10
1	= Parents x Parents and Lac Testers on complete medium									
2	(B Lac)									
3	Lac ^D									
4										
5	W3229	W3836	W4358	W4359	W4360	W4361	W4362			
6										
7	F-Lac Proto.	W4147	+ sl	-	+	-	+	+	+	+
8	streak all	# Parent	W4265	-	-	+	-	+	+	+
9	?	"	W4358	+	+	-	-	+	+	+
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W 4359 is poorly readable as it ferments somewhat.
W 4360 and 61 behave so = .

w3229

below
test

1	
2				
3	58-	4265	4362	
4	$\{$	3836		
5	H/2			

only W4362 in this series may be \cong 4265

~~go to~~ fast

all these
are $\frac{c}{f}$ 4265

* Upon streaking of doubtful + areas, there are +'s (low proportion in 4265/4362).

Dec. 28¹⁹ 58

REF:

1	2	3	4	5	6	7	8	9	10
1 Since the b isolate of 5-57 had segregated in liquid, the c 2 isolate was streaked on Ara + Lac + Gal = Ara V, Lac 3 peculia (= - and \neq papillating) and Gal = 2 colony types.									
4									
5									
6 H single colony V's were picked from Ara, streaked 7 on Ara and Lac, and inoc. into DM-Ara-BI.									
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Dec. 26 1958

REF:

Ara V # 5's (= w4362 ♂ parent) tested for Lac types.

on EMB Lac

w3229 w3836

w4358 w4360 w4362

+ x ♀ parent W4365

+ x ♂ parent W4362

5-5

5-13

-14

-15'

-20

-21

-27

-11

-34

-57

5-20 Ara-
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